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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/596,686

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Norbert Deutloff

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WESTMAN CHAMPLIN & KELLY, P.A.
SUITE 1400
900 SECOND AVENUE SOUTH
MINNEAPOLIS, MN 55402

EXAMINER

BOWES, STEPHEN M

ART UNIT

PAPER NUMBER

3657

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/596,686	DEUTLOFF ET AL.	
	Examiner	Art Unit	
	STEPHEN BOWES	3657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13-16, 19, 22, 24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-16, 19, 22, 24, 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/13/2011 has been entered.

Claim Objections

2. Claim 23 is objected to because of the following informalities: Applicant claims "actuating" should probably be "actuating". Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 9-11, 13-16, 19, 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Petrak (US 2003/0075001).

As per claim 1, Petrak discloses a setting device (Title) comprising a setting unit (Abstract) featuring a remotely-operated drive (Fig. 35C), a telescopic device (Fig. 35) movable axially in a housing (1512) in a longitudinal axis of the setting unit, containing a hollow shaft (1522) and a spindle shaft (1510) connected to the hollow shaft in a

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manner that enables the hollow shaft to rotate and that enables the spindle shaft to undergo advancing movement relative to the remotely-operated drive and to thereby actuate a brake cable ([0173]), a connection (0168) enabling the transmission of a torque for actuating the brake cable from the remotely-operated drive to the hollow shaft, the connection enabling the hollow shaft to move axially relative to the remotely-operated drive, and an axial advancing support between the hollow shaft on the one side and the housing on the other side via at least one elastic element (1596; [0171]) stationary relative to the spindle shaft and the brake cable and arranged in parallel in the direction of the hollow shaft loaded axially by the advancing support and thereby axially deformable.

As per claim 2, Petrak discloses the setting device according to claim 1, comprising an electric motor (1506; [0129]) for the remotely-operated drive.

As per claim 3, Petrak discloses the setting device according to claim 1, comprising a transmission (1504) between the remotely-operated drive and the hollow shaft.

As per claim 4, Petrak discloses the setting device according to claim 3, comprising an intermediate gear wheel (1626) between a drive gear element (1624) of the remotely-operated drive and a drive gear wheel (1628) of the hollow shaft, the intermediate gear wheel and the meshing drive gear wheel of the hollow shaft being enabled to move axially relative to each other at least to the extent of an operational stroke distance of the at least one elastic element (The gears are capable of sliding axially under sufficient loading, Fig. 35).

As per claim 5, Petrak discloses the setting device according to claim 1, wherein the at least one elastic element is used as a correspondingly axially moved force sensor emitter for its longitudinal deformation for the axial advancing force acting from the motorized drive via the hollow shaft on the spindle shaft (1596).

As per claim 9, Petrak discloses the setting device according to claim 1, wherein the at least one elastic element is embodied as a spring screw (1596).

As per claim 10, Petrak discloses the setting device according to claim 9, wherein the at least one elastic element is arranged or embodied as a spring screw surrounding the hollow shaft concentric to the hollow shaft or the spindle shaft in its opposite direction of rotational advance (1596).

As per claim 11, Petrak discloses the setting device according to claim 1, wherein the at least one elastic element is embodied as a compression spring element (1596).

As per claim 13, Petrak discloses the setting device according to claim 5, wherein the at least one elastic element is used as a force sensor emitter for determining the brake application force of a motor vehicle parking brake (1596).

As per claim 14, Petrak discloses the setting device according to claim 5, wherein the at least one elastic element is used as a force sensor emitter for determining the brake release force of a motor vehicle parking brake (1596).

As per claim 15, Petrak discloses the setting device according to claim 1, wherein a first elastic element (1596) is loaded axially by advancing support for an axial advancing movement of the telescopic device, on application of a motor vehicle parking

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brake; and wherein a second elastic element (1618) is loaded axially in the other axial direction of movement of the telescopic device by advancing support, on release of the motor vehicle parking brake.

As per claim 16, Petrak discloses the setting device according to claim 15, comprising a different elasticity constant of the first elastic element by comparison with the elasticity constant of the second elastic element (1596, 1618).

As per claim 19, Petrak discloses the setting device according to claim 15, comprising an arrangement of the second elastic element axially before or after the first elastic element (Fig. 35).

As per claim 22, Petrak discloses a motor vehicle parking brake (Title), comprising a drive unit (Fig. 35) featuring a remotely-operated drive (Fig. 35C), a telescopic device (Fig. 35) movable axially in a housing (1512) in a longitudinal axis of the setting unit, containing a hollow shaft (1522) and a spindle shaft (1510) connected to the hollow shaft in a manner that enables the hollow shaft to rotate and that enables the spindle shaft to undergo advancing movement relative to the remotely-operated drive and to thereby actuate a brake cable ([0173]), a connection ([0168]) enabling the transmission of a torque for actuating *[sic]* the brake cable from the remotely-operated drive to the hollow shaft, this connection enabling the hollow shaft to move axially relative to the remotely-operated drive, and an axially advancing support between the hollow shaft on the one side and the housing on the other side via at least one elastic element (1596; [0171]) stationary relative to the spindle shaft and the brake cable during

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a drive into the release position of the brake of an axially loaded and thereby axially longitudinally deformable elastic element.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6-8, 24-25 rejected under 35 U.S.C. 103(a) as being unpatentable over Petrak (US 2003/0075001) in view of Flynn et al (US 2003/0066714).

As per claim 6, Petrak discloses the setting device according to claim 5, but does not disclose a force sensor receiver which is stationary relative to the spindle shaft and the brake cable and assigned to the force sensor emitter. Flynn et al discloses a parking brake system comprising a force sensor receiver (190; [0047]) which is stationary relative to the spindle shaft and the brake cable and assigned to the force sensor emitter. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the parking brake of Petrak by using the spring sensor assembly as taught by Flynn et al in order to provide a more accurate reading than would normally be gleaned from cable tension alone.

As per claim 7, Petrak and Flynn et al disclose the setting device according to claim 6. Flynn et al further discloses comprising an arrangement of the force sensor receiver as an integrated part of a control unit of the setting unit ([0047]).

As per claim 8, Petrak and Flynn et al disclose the setting device according to claim 7. Flynn et al further discloses wherein the control unit is arranged in the area of the telescopic device (Fig. 9).

As per claim 24, Petrak and Flynn et al disclose the setting device according to claim 6. Flynn et al further discloses wherein: the force sensor receiver is in the form of a Hall chip assigned to the magnetic force sensor emitter (190; [0047]).

As per claim 25, Petrak and Flynn et al disclose the setting device according to claim 6. Flynn et al further discloses comprising: an arrangement of the force sensor receiver as an integrated part of a control unit of the setting unit, which is accommodated by a fixed circuit board ([0047]).

Response to Arguments

7. Applicant's arguments with respect to claims 1-11, 13-16, 19, 22, 24 and 25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEPHEN BOWES whose telephone number is (571) 270-5787. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/STEPHEN BOWES/
Examiner, Art Unit 3657

/Robert A. Siconolfi/
Supervisory Patent Examiner, Art
Unit 3657